

# NASA TECH BRIEF

## *Marshall Space Flight Center*



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### Quick Response Targeting Program

The Quick Response Targeting Program is the only known computer program designed to both generate and verify operational launch vehicle targeting presettings for lunar free-return missions. Though used primarily for lunar landing missions, the program should also find application in the fields of astronomy and nuclear physics, and in areas where an improved targeting technique would be valuable.

The program is actually a package consisting of the Preprocessor Program, the Translunar Injection Program, the Launch Vehicle Simulation Program, and the Trajectory Data Post Processor. The magnetic tape linkage between the component programs, together with a reliable lunar trajectory design, provide a rapid response for mission retargeting, in addition to an efficient nominal mission targeting capability. The program supplies a higher degree of computation accuracy, a faster response, and a significantly increased reliability over targeting techniques previously available.

#### Notes:

1. The program package is written in FORTRAN IV and ASSEMBLER languages for use on the IBM-360 computer.
2. Requests for further information may be directed to:

COSMIC  
Barrow Hall  
University of Georgia  
Athens, Georgia 30601  
Reference: B71-10147

#### Patent status:

No patent action is contemplated by NASA.

Source: Jerry T. Bosley of  
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